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Sequence Listings

<110> Roche Vitamins AG
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 <130> 21424
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 30 Phe Thr Ser Arg Val Leu Thr Thr Gly Leu Ser Asn Pro Trp Glu 60
 Ile Thr Trp Gly Pro Asp Asn Met Leu Trp Val Thr Glu Arg Ser 75
 Ser Gly Glu Val Thr Arg Val Asp Pro Asn Thr Gly Glu Gln Gln 90
 35 Val Leu Leu Thr Leu Thr Asp Phe Ser Val Asp Val Gln His Gln 105
 Gly Leu Leu Gly Leu Ala Leu His Pro Glu Phe Met Gln Glu Ser 120
 40 Gly Asn Asp Tyr Val Tyr Ile Val Tyr Thr Tyr Asn Thr Gly Thr 135
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5 Ala Pro Asp Gly Gln His Ile Phe Tyr Thr Leu Gly Glu Gln Gly 195
Ala Asn Phe Gly Gly Asn Phe Arg Arg Pro Asn His Ala Gln Leu 210
10 Leu Pro Thr Gln Glu Gln Val Asp Ala Gly Asp Trp Val Ala Tyr 225
Ser Gly Lys Ile Leu Arg Val Asn Leu Asp Gly Thr Ile Pro Glu 240
Asp Asn Pro Glu Ile Glu Gly Val Arg Ser His Ile Phe Thr Tyr 255
15 Gly His Arg Asn Pro Gln Gly Ile Thr Phe Gly Pro Asp Gly Thr 270
Ile Tyr Ala Thr Glu His Gly Pro Asp Thr Asp Asp Glu Leu Asn 285
20 Ile Ile Ala Gly Gly Gly Asn Tyr Gly Trp Pro Asn Val Ala Gly 300
Tyr Arg Asp Gly Lys Ser Tyr Val Tyr Ala Asp Trp Ser Gln Ala 315
Pro Ala Asp Gln Arg Tyr Thr Gly Arg Ala Gly Ile Pro Asp Thr 330
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Pro Leu Thr Thr Tyr Trp Thr Val Asp Asn Asp Tyr Asp Phe Thr 360
30 Ala Asn Cys Gly Trp Ile Cys Asn Pro Thr Ile Ala Pro Ser Ser 375
Ala Tyr Tyr Tyr Ala Ala Gly Glu Ser Gly Ile Ala Ala Trp Asp 390
Asn Ser Ile Leu Ile Pro Thr Leu Lys His Gly Gly Ile Tyr Val 405
35 Gln His Leu Ser Asp Asp Gly Gln Ser Val Asp Gly Leu Pro Glu 420
Leu Trp Phe Ser Thr Gln Asn Arg Tyr Arg Asp Ile Glu Ile Ser 435
40 Pro Asp Asn His Val Phe Val Ala Thr Asp Asn Phe Gly Thr Ser 450
Ala Gln Lys Tyr Gly Glu Thr Gly Phe Thr Asn Val Leu His Asn 465

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5 Thr Gln Val Pro Ala Glu Gly Ala Gly Ala Gly Ala Thr Glu Val 510
Ala Asp Val Asp Tyr Asp Thr Leu Phe Thr Glu Gly Gln Thr Leu 525
10 Tyr Gly Ser Ala Cys Ala Ala Cys His Gly Ala Ala Gly Gln Gly 540
Ala Gln Gly Pro Thr Phe Val Gly Val Pro Asp Val Thr Gly Asp 555
Lys Asp Tyr Leu Ala Arg Thr Ile Ile His Gly Phe Gly Tyr Met 570
15 Pro Ser Phe Ala Thr Arg Leu Asp Asp Glu Glu Val Ala Ala Ile 585
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Gly Glu Val Thr Arg Val Asp Pro Asn Thr Gly Glu Gln Gln Val 60
25 Leu Leu Thr Leu Thr Asp Phe Ser Val Asp Val Gln His Gln Gly 75
Leu Leu Gly Leu Ala Leu His Pro Glu Phe Met Gln Glu Ser Gly 90
30 Asn Asp Tyr Val Tyr Ile Val Tyr Thr Tyr Asn Thr Gly Thr Glu 105
Glu Ala Pro Asp Pro His Gln Lys Leu Val Arg Tyr Ala Tyr Asp 120
Ala Ala Ala Gln Gln Leu Val Asp Pro Val Asp Leu Val Ala Gly 135
35 Ile Pro Ala Gly Asn Asp His Asn Gly Gly Arg Ile Lys Phe Ala 150
Pro Asp Gly Gln His Ile Phe Tyr Thr Leu Gly Glu Gln Gly Ala 165
40 Asn Phe Gly Gly Asn Phe Arg Arg Pro Asn His Ala Gln Leu Leu 180

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Pro Thr Gln Glu Gln Val Asp Ala Gly Asp Trp Val Ala Tyr Ser 195

Gly Lys Ile Leu Arg Val Asn Leu Asp Gly Thr Ile Pro Glu Asp 210

5 Asn Pro Glu Ile Glu Gly Val Arg Ser His Ile Phe Thr Tyr Gly 225

His Arg Asn Pro Gln Gly Ile Thr Phe Gly Pro Asp Gly Thr Ile 240

Tyr Ala Thr Glu His Gly Pro Asp Thr Asp Asp Glu Leu Asn Ile 255

10 Ile Ala Gly Gly Gly Asn Tyr Gly Trp Pro Asn Val Ala Gly Tyr 270

Arg Asp Gly Lys Ser Tyr Val Tyr Ala Asp Trp Ser Gln Ala Pro 285

15 Ala Asp Gln Arg Tyr Thr Gly Arg Ala Gly Ile Pro Asp Thr Val 300

Pro Gln Phe Pro Glu Leu Glu Phe Ala Pro Glu Met Val Asp Pro 315

Leu Thr Thr Tyr Trp Thr Val Asp Asn Asp Tyr Asp Phe Thr Ala 330

20 Asn Cys Gly Trp Ile Cys Asn Pro Thr Ile Ala Pro Ser Ser Ala 345

Tyr Tyr Tyr Ala Ala Gly Glu Ser Gly Ile Ala Ala Trp Asp Asn 360

25 Ser Ile Leu Ile Pro Thr Leu Lys His Gly Gly Ile Tyr Val Gln 375

His Leu Ser Asp Asp Gly Gln Ser Val Asp Gly Leu Pro Glu Leu 390

Trp Phe Ser Thr Gln Asn Arg Tyr Arg Asp Ile Glu Ile Ser Pro 405

30 Asp Asn His Val Phe Val Phe Thr Asp Asn Ile Thr Thr Ser Phe 420

Gln Lys Tyr Gly Glu Thr Gly Phe Thr Asn Val Leu His Asn Pro 435

35 Gly Ala Ile Leu Val Phe Ser Tyr Val Gly Glu Asp Ala Ala Gly 450

Gln Thr Gly Met Met Thr Ala Pro Ala Pro Gln Thr Gln Tyr Thr 465

Gln Val Pro Ala Glu Gly Ala Gly Ala Gly Ala Thr Glu Val Ala 480

40 Asp Val Asp Tyr Asp Thr Leu Phe Thr Glu Gly Gln Thr Leu Tyr 495

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Gly Ser Ala Cys Ala Ala Cys His Gly Ala Ala Gly Gln Gly Ala 510
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5 Asp Tyr Leu Ala Arg Thr Ile Ile His Gly Phe Gly Tyr Met Pro 540
Ser Phe Ala Thr Arg Leu Asp Asp Glu Glu Val Ala Ala Ile Ala 555
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<400> 7
40 gtytcgttng crccvac 17

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